Figure 1

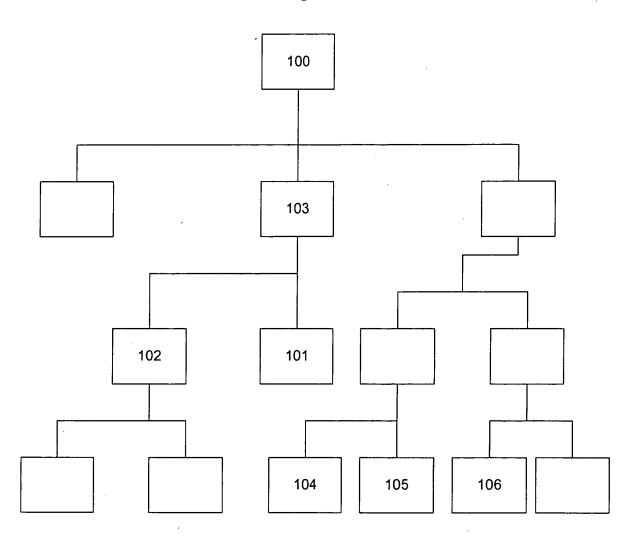


Figure 2A

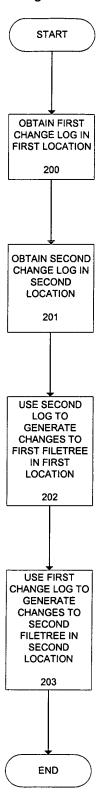


Figure 2B START OBTAIN FIRST CHANGE LOG IN CLIENT LOCATION 204 OBTAIN SECOND CHANGE LOG IN SERVER LOCATION 205 USE SERVER LOG TO GENERATE CHANGES TO FIRST FILETREE IN CLIENT LOCATION 206 USE CLIENT CHANGE LOG TO GENERATE **CHANGES TO** SECOND FILETREE IN SERVER LOCATION 207

END

Figure 3

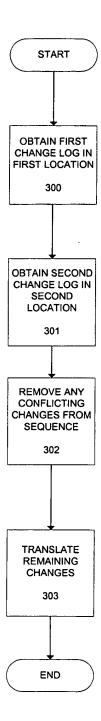


Figure 4 START COMPARE EACH OPERATION INA SERVER LOG AGAINST ENTIRE CLIENT LOG 400 COMPARE THE SERVER OPERATIONS AGAINST A PARTICULAR CLIENT OPERATION 401 ADD PAIR TO A CONFLICT LIST DOES CLIENT OPERATION SEMANTICALLY CONFLICT WITH A SERVER OPERATION? YES 403 402 NO DOES OPERATION CAUSE 2 OBJECTS TO BECOME EACH OTHER'S ANCESTORS? YES NO TRANSLATE USING OBJECTS IS OPERATION
RENAME/REPARENT OF
OBJECT OR A ANCESTOR OF OBJECT? YES **NEW LINEAGE** 405 406 NO ADD TRANSLATED SERVER OPERATION TO SEQUENCE OF OPERATIONS FOR THE CLIENT

407

END

Figure 5

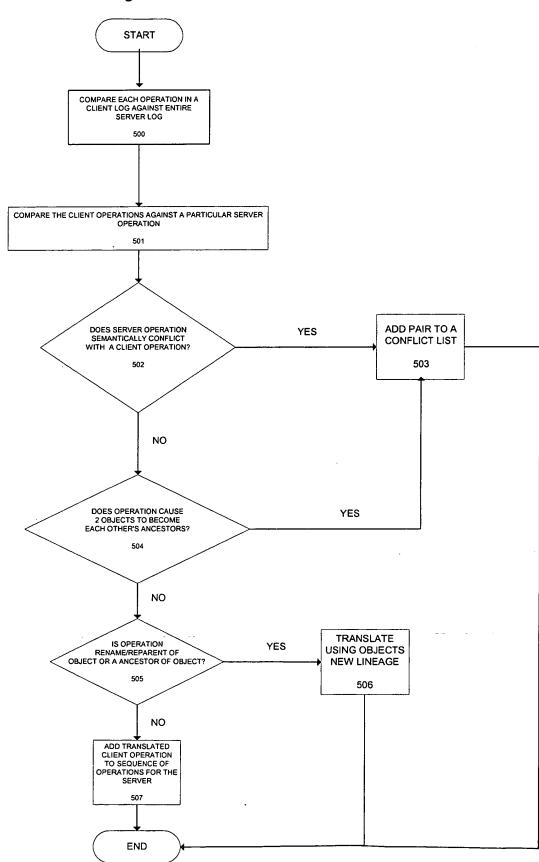


Figure 6

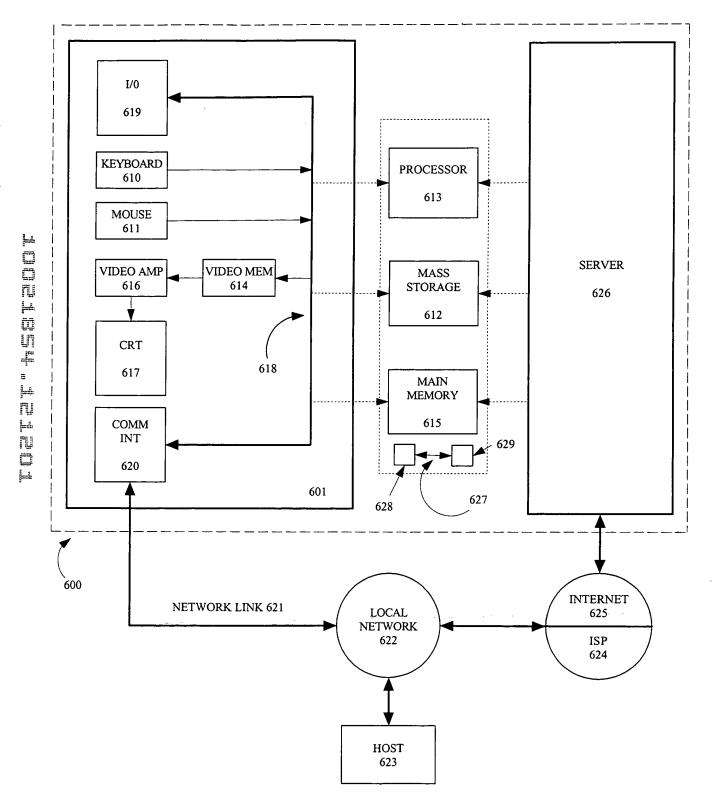


Figure 7

